

AMENDMENTS TO THE SPECIFICATION

IN THE SPECIFICATION:

Please replace the paragraph starting on page 1, line 12 and ending on page 1, line 17, with the following amended paragraph:

In the recently developed VOD (Video on Demand) multimedia service system through the Internet, as a client (a user) requests a desired multimedia from a server (an information provider), the server provides the multimedia to the client through the Internet. The VOD multimedia service system is adopted for use ~~[[to]]~~ in various fields, such as ~~[[a]]~~ home-shopping, ~~[[a]]~~ remote education, ~~[[an]]~~ MOD (Music on Demand) or ~~[[an]]~~ NOD (News on Demand).

Please replace the paragraph starting on page 3, line 14 and ending on page 3, line 17 with the following amended paragraph:

Figure 3 shows a construction for explaining a method in which ~~[[a]]~~ the multimedia service system ~~using a virtual server of Figure 2~~ transmits multimedia to clients ~~that accesses thereto~~ at different times ~~to each other~~ in accordance with the present invention;

Please replace the paragraph starting on page 6, line 3 and ending on page 6, line 7 with the following amended paragraph:

Accordingly, since the controller manages information of a client and the auxiliary memory of the virtual server stores the multimedia, the client may have a reduced size of buffer. The multimedia requested suitable to the multimedia display speed of the client is received ~~by~~ from the virtual server, decoded and then displayed.

Please replace the paragraph starting on page 6, line 8 and ending on page 6, line 11 with the following amended paragraph:

Figure 3 shows a construction for explaining a method in which [[a]] the multimedia service system ~~using a virtual server of Figure 2~~ transmits multimedia to clients ~~that accesses thereto~~ at different times to ~~each other~~ in accordance with the present invention.

Please replace the paragraph starting on page 6, line 12 and ending on page 6, line 16 with the following amended paragraph:

As aforementioned, when the client 150-1 requests a multimedia, the virtual server 130 receives the multimedia M1, M2, M3 and M4 from the server 110 and stores it in the main memory ~~403-3~~ 130-3 of the virtual server 130. And then, the virtual server 130 transmits the multimedia to the client 150-1 and at the same time stores it in ~~the~~ its auxiliary memory 130-4.

Please replace the paragraph starting on page 6, line 17 and ending on page 6, line 20 with the following rewritten paragraph:

At this time, in case that a different client 150-2 requests the same multimedia ~~as the multimedia~~ that has been requested by the client 150-1, the virtual server transmits the multimedia corresponding to the request of the different client from the auxiliary memory 130-4 to the client 150-2.

Please replace the paragraph starting on page 7, line 5 and ending on page 7, line 11 with the following rewritten paragraph:

As stated above, the data transfer rate of the access network 140 and the data transfer rate of the core network 120 are different ~~[[to]]~~ from each other, the virtual server 130 uses the protocol adopted in the access network between itself and the client to sense a traffic of the access network. According to the traffic, the virtual server 130 receives a multimedia having the same multimedia content but different size from the multimedia data base (DB1 and DB2) 110-1 and 110-2 of the server 110 and transmits it to the client 150.

Please replace the paragraph starting on page 7, line 12 and ending on page 7, line 19 with the following amended paragraph:

In this respect, in case that the traffic of the access network is not delayed, the data base DB1 110-1 stores a multimedia of a full size to be transmitted to the client through the virtual server. Meanwhile, in case that the traffic of the access network is delayed, the data base ~~DV2-110-2~~ DB2 110-2 extracts and stores the critical part of the multimedia stored in the data base ~~DB1-100-1~~ DB1 110-1, to be transmitted to the client through the virtual server. The critical part of the multimedia may be a ~~data-of-which 'B' pictures~~ [[is]] reduced in number or a ~~data-of-which 'B' and 'P' pictures~~ are reduced in number in a multimedia of an MPEG form.

Please replace the paragraph starting on page 7, line 24 and ending on page 8, line 5 with the following amended paragraph:

First, the virtual server 130 receives both the multimedia from the data base ~~DV1-110-1~~ DB1 110-1 of the server 110 storing the full-size of multimedia and the multimedia from the data base DB2 110-2 of the server 110 storing the critical part extracted from the multimedia of the same content and stores them in the main memory and the auxiliary memory. In this state, when the client 150-1 requests a multimedia, the virtual server provides the corresponding client 150-1 with the full-size of the multimedia.

Please replace the paragraph starting on page 8, line 6 and ending on page 8, line 11 with the following amended paragraph:

At this time, in case that the virtual server which detects the traffic of the access network judges that there occurs a traffic delay, the virtual server requests and receives the critical part extracted from the multimedia from the data base ~~DB2-130-2~~ DB2 110-2 of the server, rather than requesting the full size of the multimedia from the data base ~~DB1-130-1~~ DB1 110-1, and then transmits the critical part of the multimedia to the corresponding client 150-2.

Please replace the paragraph starting on page 8, line 23 and ending on page 9, line 8 with the following amended paragraph:

Since there is a difference between the data transfer rate of the core network and the data transfer rate of the access network, the virtual server is installed to reduce the transfer rate difference. That is, the virtual server buffers a slot transfer scheduling and the slot 'Si' in the main memory and the auxiliary memory, to control the traffic so that the slot is transmitted from the server to the client within the time adding the time T1 and the time T2. In this respect, in case that the transfer time of the slot 'Si' is ~~granted~~ greater than the addition of the time during which the virtual server receives the data and the time during which the virtual server transmits the data (that is, $T > T1 + T2$), the virtual server fetches the data from the server and buffers it for as long as the difference time [$T' = T - (T1 + T2)$], thereby effectively controlling the traffic of the network.

Please replace the paragraph starting on page 9, line 14, and ending on page 9, line 21 with the following amended paragraph:

As the present invention may be embodied in several forms without departing from the spirit or essential characteristics thereof, it should also be understood that the above-described embodiments are not limited by any of the details of the foregoing description, unless otherwise specified, but rather should be construed broadly within its spirit and scope as defined in the appended claims, and therefore all changes and modifications that fall within the ~~meets~~ metes and bounds of the claims, or equivalence of such ~~meets~~ metes and bounds are therefore intended to be embraced by the appended claims.